



mICT

MASTER IN INFORMATION AND COMMUNICATION TECHNOLOGIES AT AALBORG UNIVERSITY COPENHAGEN

**mICT IS A FLEXIBLE, INTERDISCIPLINARY, PART-TIME
EDUCATION PROGRAMME IN THE FIELD OF ICT**

**mICT IS A CONTINUING EDUCATION PROGRAMME DESIGNED FOR YOU WHO WORK
IN THE ICT INDUSTRY AND WANT TO KEEP YOUR JOB WHILE STUDYING**



AALBORG UNIVERSITY
DENMARK
AALBORG ESBJERG COPENHAGEN

THE PROGRAMME

THE PROGRAMME IS OFFERED AS A PART-TIME STUDY OVER 2 OR 3 YEARS

A FULL TIME STUDY OF 1 YEAR IS ALSO AVAILABLE

The programme is provided in three trimesters, where a trimester in the full time (one year) version of the education is equivalent to four months, in the part time (two years) version is equivalent to eight months and in the part time (three years) version is equivalent to one year.

The programme covers 3 main areas:

- Networks and services
- Design and users
- Market and regulation

ABOUT US

The Master in Information and Communication Technologies is an international master's programme offered by the center for Communication, Media and Information technologies (CMI) at Aalborg University Copenhagen (AAU-Cph) designed for you who work in the ICT industry and want to keep working while taking a master's degree. The mICT programme helps executive students address key technical and business challenges in their company with relevant academic coursework and a concurrent work-related project. The courses are primarily given in the evening and during weekends.

The aim of the programme is to give participants cross-disciplinary qualifications within key areas related to information and communication technologies.

The cross-disciplinary profile addresses the growing need for engineers who are able to combine knowledge from different areas:

- Internet, Communication and Broadcast Technologies and Converging Media
 - Services and Platforms
- Development of User-Friendly Applications, Solutions and Services
 - Business Development and Business Models
- Security, Trust, Privacy; Legal and Ethical Aspects
 - Organisational Aspects of ICT
 - ICT Market and Regulation
 - ICT Management

SPECIALISATIONS

The mICT programme offers three specialisations:

- ICT Services and Platforms (ISP)
- Management of ICT Innovations (MII)
- Cyber and Information Security (CIS) - NEW

All specialisations have the interdisciplinary approach, combining the above-mentioned academic areas. The ISP specialisation has a technical focus and provides theories, tools and methods for development of ICT and media services, while the MII specialisation has an ICT managerial focus and includes the theories, methods and tools for understanding business processes and service design.

The aim of the new specialisation in Cyber and Information Security (CIS) is to give the participants in-depth knowledge about CIS both from the technological and law perspectives. The elements included in the specialisation are amongst others:

- Governance of ICT security, with focus on enterprises,
- Trust, Identity and access management,
- Economics of privacy
- Personal data and privacy (technology, design, legal rules etc.),
- EU and national IT security and data protection laws regarding cyber attacks,
- Risk management,
- Cyber security threats such as destructive malware, fake antiviruses & Denial-of-Service attacks in organisations.

In the final thesis, the student can choose to focus on the regulatory and law issues or on the security and privacy issues from a technological point of view.



	1ST TRIMESTER THEME: ISP: SERVICES AND PLATFORMS CIS: ENTERPRISES CYBER SECURITY MII: ORGANISATIONS AND INNOVATIONS	2ND TRIMESTER THEME: ISP: APPLICATION DEVELOPMENT CIS: PRIVACY & SECURITY FRAMEWORKS IN ORGANISATIONS MII: SERVICE DESIGN	3RD TRIMESTER THEME: MASTER'S PROJECT
Courses	10 ECTS	10 ECTS	5 ECTS
Project	10 ECTS	10 ECTS	15 ECTS
Total	20 ECTS	20 ECTS	20 ECTS

1ST TRIMESTER

Here, you will obtain a solid understanding of the ICT business models and business eco systems. Furthermore, depending on the chosen specialisation; in the ISP specialisation, you will focus on the technologies behind networks and systems and the service architectures and platforms, in the MII specialisation, you will focus on organisational aspects, including technology and innovation management, and in the CIS specialisation, you will focus on enterprise security from a law and regulatory perspective.

2ND TRIMESTER

Through the second trimester, you will become able to explore and apply the potential of ICT to address a wide variety of user and organisational needs. This is realised by analysing, designing, implementing and testing applications and services that can be deployed on ICT platforms and infrastructures. The process is carried out with a constant focus on target users, usage scenarios, stakeholders and business aspects to ensure the validity of approaches. In the second trimester, the ISP specialisation is focused on the development of applications, the MII specialisation is focused on services design, and the CIS specialisation is focused on privacy and security frameworks in organisations from a technological perspective.

3RD TRIMESTER

During the 3rd trimester, you carry out your master's project. The aim is to document that you individually or as part of a small group are able to plan and finalise a project at a high technological level. The topic of the project depends on the specialisation and your area of interest within the programme's themes. The project must document your ability to apply scientific theories and methods at a high level.

For further information, please see mict.aau.dk.

PROBLEM BASED LEARNING

The mICT programme is taught via extensive use of IT-supported distance education tools. The programme consists of:

- Interactive courses with web-based support
- Face-to-face courses at seminars
- Courses, project work information, dialogue with teachers, dialogue with fellow participants, etc., based on distance learning tools.

About half the programme content is project work and the other half is courses. The programme is taught in English.

The study method is Problem Based Learning (PBL), an internationally recognised method of active learning through problem solving. Key components include

- Flexible knowledge
- Self-directed learning
- Intrinsic motivation
- Collaborative skills

The problem based project work at Aalborg University gives you a unique opportunity to acquire new knowledge and competences at a high academic level and in an independent manner.

” The mICT programme has strengthened my skills in **turning technology knowledge into profitable products and solutions.** In particular, the pro-gramme has strengthened my business understanding, technical knowledge and understanding of regulatory matters within ICT-related markets. As a result, I feel more confident today when I make technical as well as business analyses and recommendations to management and colleagues.

Lars Kierkegaard
Product Manager, Teracom A/S



While adding both academic and social dimensions, the group work adds to your professional profile skills that are much sought after in industry. Our study method is highly valued by industry, and international evaluations (by among others OECD) have defined it as ideal for learning.

FURTHER INFORMATION

ADMISSION

In order to be admitted to the mICT programme, you need to have a bachelor's degree in engineering, computer science or equivalent qualifications and at least two years of relevant work experience in the industry.

English proficiency is required.

APPLICATION DEADLINE

1st May. See also mict.aau.dk/admission.

CONTACT

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